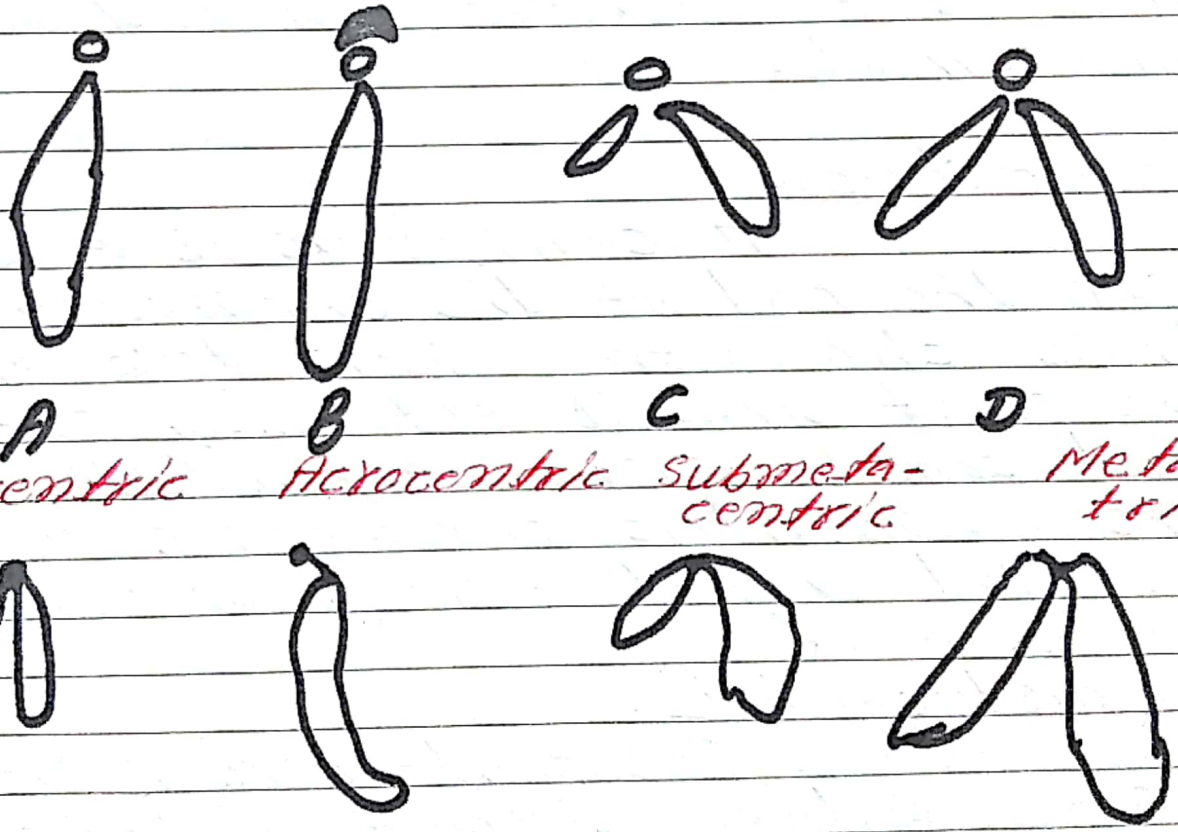
Shape of Chromosomes :-

The shape of chromosomes is observed during anaphasic movement and the shape depends upon position and type of centromere.

The chromosomes on the basis of position of centromere can classified into four types :-



A Telocentric B Acrocentric C Submeta-centric D Metacentric

Fig :- chromosome organisation

NOTES

(ii) Telocentric:-

In telocentric chromosomes the centromere is present on proximal end or at tip of the chromosome. The chromosomes make rod shapes during anaphasic movement. Telocentric chromosomes are rare. Telocentric chromosomes are reported in some plants, protozoa and some mammals.

(iii) Acrocentric:-

A centromere is present near the end of the chromosome, these chromosomes have two arms, the short arm is extremely short and can be even imperceptible. The acrocentric chromosome appears as rod shaped during anaphasic movement.

(iii) Submetacentric:

The centromere is situated at some distance away from the centre of chromosomes. The two arms of chromosomes are unequal. These chromosomes make L shape during movement.

(iv) Metacentric:

NOTES

The centromere lies in the centre of chromosomes. The chromosomes have equal or almost equal arms. These chromosomes make V-shape figures during movement.